

SOCIO-ECONOMIC IMPACTS AND STRESSES SUFFERED BY AGBA-NDELE PEOPLE, DURING THE UNCOMPENSATED 2009 OIL SPILLAGE INCIDENCE WITHIN THE SOMBRERO TIDAL STREAM IN RIVERS STATE. A REMINISCENCE AND FLASHBACK EXPERIENCE.

Orime Okechukwu C.N.

ISS, Rivers State University of Science and Technology Nkpolu, P.M.B. 5080, Port Harcourt. E-mail: okechukwunoble@yahoo.com

ABSTRACT

The oil industry has had a number of socio-economic effects in regions where oil-drilling and shipping takes place. The term oil spillage is said to have occur only when oil flows into areas that were not initially anticipated nor designated by the producing company. The extent of damage done by an oil spillage is determined by the type of oil spilled, where, when and how long has this spills remained in the environment such as Agba-Ndele terrestrial and her nearby Sombrero tidal streams, have suffered much losses, covering biotic, abiotic, conflict, inter communal clashes, compulsive stress disorder, agoraphobic disorder, post traumatic stress disorder and soma to form of stress disorder respectively. A simple random sampling method of data finding during investigation was used with the affected neighbourhood, the study involved the two clan, the Mgbu-Odokne setting and the Mgbu-Eze setting, maximum empirical observation accompanied with useful intelligent interviews and the uses of local language, to assess their feelings, pains as they make responses were used. Consequently, this observation was tested using the chi-square (X^2) test statistic vis-à-vis. The direct and indirect impacts to those who uses the River daily as fishing occupation, local sharp sand excavators, in a locally made carpentering boats, was observed significant, this was substantiated using the coefficients of chi-squared residuals (R). Based on finding, the study highlighted the associated socio-economic impacts and stress suffered by Agba-Ndele people, and the renewable/nonrenewable problems of the oil polluted environment which have caused a wide vacuum uncovered when viewing the biodiversity rate of species.

KEYWORDS: Oil industry, socio-economic impact, Agba-Ndele, sand excavator

INTRODUCTION

The current crisis between oil companies and host communities, is largely concentrated in south western oil producing areas of Rivers, Cross River and Delta State particularly, the Agba-Ndele people in Emohua Local Government Area of Rivers State is not exempted from these deltaic regions, sharing a geographical boundary with Rumuewhor by North Rumuekepe by south, Abua/Odual by East, with a total natural demarcation with the Sombrero fresh tidal stream; have over the year suffered for seasonal oil spillage, this impacts shall be reminiscence and flashed back right from 1956 when Shell B.P. Limited discovered oil in Oloibiri in very large commercial quantity, as Agba-Ndele farm land and river suffered for severe devastation and degradation. Awobajo, (1981). Beside this devastation at the detriment of biotic and abiotic lifes, the Agba-Ndele people have over the year, suffered for an increasing intimidation and threat by the gun-point oil explorators within the Niger Delta Areas as such cases of legal suits in several courts of law, over oil pollution and economic hardship, arising from severe oil spillage at the time, is no longer a new issue as such, then this study is accounting in details, how and why, will their working relationship between Shells and her host communities be like "cart and dog". The youths within the community under investigation, also have suffered for severe traumatic stress, agoraphobic stress, soma to form of stress, affective stress disorder, and even post traumatic stress cases, as the multinational oil companies had caused some psychological imbalance in the affective domain and emotional state of the people of Agba-Ndele. Nwankwo, (1982). This kind of psychological illness, have caused a lot of self maintainable degree of mental illness, such as schizophrenia, delirium, dementia, when viewed psychologically, this is also seen manifesting in the faces of those disappointed fishermen, the sharp sand excavators, in Agba-Ndele, whose damages to their canoe have caused a lot of psychological imbalances as was destroyed in the 2009 mid year oil spillage, a situation where most of them are seen talking alone, with the subject matter "on the past oil spillage in their life"

Interviewed held with some of them and also a fact gathered by direct empirical observation records the following sarcastical, sadual and some sympathizing pathetic comments: “My poverty and failure started, after the last oil spillage in Agba-Ndele Sombrero Rivers, where all my fishing traps, nets and fishing ponds have being filled with crude oil slick; it has exposed me to a beggar in my life” as shown in the picture below:



Picture 1(a): Showing damaged fishing traps, also showing how children are collecting the naked crude below:



Picture 1(b): Showing how fishing instrument is seen packed inside black rubber damaged and soiled with crude oil

Awobanjo, (1981) assed the level of oil spillage to all environment, as a severe and is capable of causing uncovered and non-replenishing eco-system. But as added by Orime, (2008), crude oil contains higher quantity of toxic materials, as a components e.g. gasoline, hexane propane, ethane, naphthalene, butane, isobutene, methane (CH₄) etc, whose level of toxicity when rated, is above chronic toxicity, acute toxicity nor sub-lethal toxicity, but rather lethal toxicity, especially to the aphortic, pelagic and epipelagic dwelling organism. He further out lined several aquatic organisms, whose mode of adaptation and living/feeding have to do with prey-catching such as sardinellas, tilapia-veloptica, and other scaly fishes associated with the fresh water habitat of a typical Sombrero tidal stream.

The loss in memory, insomnia i.e inability to sleep, temperamental characteristic, choleric attitudes, melancholy and total rise in blood level of those whose fishing equipments was damaged, during the 2009 oil spillage in Agba-Ndele is a living testimony. Most victims who was rushed to the Rumuigbo Psychiatry Hospital, during their bed interviewed unconsciously raised an alarm and asked the doctor:

“where is my fishing equipments, which I borrowed money and bought in a local meeting, valued at fifty thousand naira.

The diagnostic medical examination test report, also proves that, his properties that got damaged, contributed to about eight five percent of his combined schizophrenia, delirium mental health problem. The available oil spill data contained in the catalogue of oil spills in Rivers State, (1980). Indicates that compulsive stress disorder level among the women, men and youths, was very high in Rivers State towns and villages, where oil spillage have occurred.

“It is surprising to note that, most places we went, women, men, and youths suffered for a severe loss, accompanied with total damage to the biodiversity, vegetation, psychosocio-physio economic integrity of the victims were sincerely beyond human description”

SUSPECTED CAUSES OF OIL SPILLS AND CRUDE OIL TYPES

Crude oil spills in Agba-Ndele tidal stream over the year, have always being briefed to have resulted due to:

- a) Blow out, which means uncontrolled escaped due to vandalization of oil wells, resulting from the hydrostatic head pressure to pull away, thereby polluting the surface water.
- b) Sabotage: is an intentional damage to equipment, pipeline and well head in order to steal the crude oil or void the plan of the company and government.
- c) Corrosion: Spills occur in pipelines and well heads as consequences of internal corrosion that is associated with low flow rates accompanied by setting of water, resulting in two phase-stratified flows.

Different in environmental factor such as oxygen, water, pH, chlorides sulphate, hydrogen (OH) in velocity and temperature at the metal corrodent interface aid corrosion; other causes are; operation or maintenance error, equipment failure, natural causes and any account by third party and unknown (mystery) etc.

Concawe, (1981) confirmed that there are several crude oils types in Nigeria some of the highlighted types are:

- a) Bonny Medium crude
- b) Bonny light crude
- c) Brass river crude
- d) Ughelli quality control crude (UUCC)
- e) Qua Iboe Crude
- f) Trans Niger Pipeline (TNP) Crude

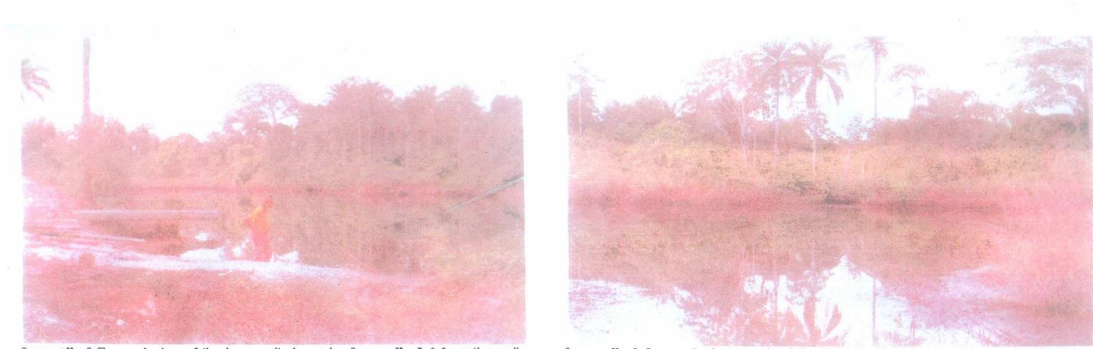
But Orime, (2008) questioned, which of this hydrocarbon crudes mentioned above, will you say have no toxic properties to cause health and environmental pollution problem nor degradation to Agba-Ndele and its Aquatic Ecosystem or other places of oil exploration activities in Niger Delta?

Mironov, (1951) further confirmed that oil spills, can be classified into

- a) Minor oil spill: A spill when occurs, records oil discharge less than 25 barrels in land waters or less than 250 barrels on land, offshore or coastal waters that does not pose any threat to public health or welfare.
- b) Medium spills: In this case, the spills must be 150 barrels or less inland water or 250 to 2,500 barrels on land, offshore and coastal water, this type of oil spill occurs as a result of the following.
 - 1. Loading or discharging operation, as applicable to militants oil bunkering in Sombreros Tidal Streams, adding more "salt to an oil pollution injury" in Agba-Ndele.
 - 2. Damage or mechanical failures
 - 3. Accidents involving tankers or offshore platforms.
 - 4. Spills from offshore drilling
 - 5. Pipeline damage
 - 6. Barge crashing

Major Spills: spills of less value that pose threat to public health and the environment, on the degree of impacts major spills are discharges of oil over 250 barrels of oil in inland waters and 2,500 barrel oil on land, offshore or coastal water.

Major oil spills eventually lead to environmental disaster (Concawe, 1981). The situation becomes severe, as the wind, tide, current and waves, influences the evaporation rate, the spread of slicks and quick determination of the possible recovery devices if not urgently considered may bring about total devastations of the hydrophytic environment/vegetation as shown in the picture below indicates that Photosynthetic activities and foliage nature of the green plants within the Sombrero tidal stream, is totally destroyed. (picture 2(a) and 2 (b)



HAZARDS OF OIL SPILLAGE

Besides that, several cases of socio-economic impacts is noted, from the beginning of this study several hazards such as fire accident, odours, discomfort from the oily slick, and total discolouration and lots of water illumination value of the aesthical water body is likely to result, decline in visibility rate of this tidal stream during major and medium oil spills, makes the river become very dark and hazardous for human consumption (domestic uses), agricultural uses and industrial uses have been proved abortive as this water is considered toxic to man and all other homosapien as indicated in pictures 3(a) and 3(b)



Picture 3(a): Showing the dark nature of the Sombrero tidal stream.



Picture 3(b): Showing the lost value of the illumination/visibility rate of the polluted stream in Agba-Ndele.



Picture 4: Showing the funneling nature of the crude oil by coastal residence of Agba-Ndele, the sources of major drinking water, has been destroyed.

This have always produced higher cases of combustible flames, even at a very lower flash point temperature of flames, to propagate a fire, such temperature under which this crude oil, can self-propagate a fire is called an auto-ignition temperature. Besides that, some naturally decorating sea side plants (the hydrophytes) of water loving plants, is also susceptible to the attack of oil pollution; but the situation, if not arrested render the benthic dwelling aquatic organism in a state of “moribund living” popularly interpreted by the Igbo speaking language as “Odi-Ndu-Enwu-ka-Nma” i.e. living in such state which the dead become better to the living kind of life. Orime, (2007). Adekunle, (1994), noted that the Clean Nigeria Association (CNA) was formed in November 1981; as a consortium of eleven oil companies operating in Nigeria including N.N.P.C., according to him, this was formed to prevent and control oil spills in Nigerians offshore waters, swamps and land; with its headquarter at Warri and Port Harcourt, which is maintained by Halliburton Company. It has also being confirmed from the statistics obtained from the Department of Petroleum Resources, that only four percent (4%) of all spills in Nigeria were caused by sabotage during the period 1976 to 1990, these statistics include offshore spills, which have been by far the largest, unlikely to be caused by sabotage, this was a basis upon which Shell B.P. claimed and refused to pay Agba-Ndele their compensation, but if this fact must be openly considered from the point of environmental justice and ethics the damage in oil installation and harm to the environment, may not be directly caused by the immediate sufferers, because the person carrying out the sabotage, is not necessarily the person who suffers the damages, but it is also confirmed that, several sabotage is carried out by those contractors likely to be paid for the cleaning exercise and bioremediation actions, this is also in most cases, master minded by the aid of a company staff, who knows the secrete of oil-well and pump head (A report from the human right watch on the (Dwelling Environment, 2007), a clear case in point, is the Obagi oil field operated by elf, and the Obobura land holder all in Rivers State, on December 31, 1996. A spillage occurred at a well head, crude oil in millions barrel destroyed all their food and cash crops, the community demanded for the agreed international best practice of cleaning and rehabilitation of the affected citizens, local contractors were hired, not the family land owners, the youths and the elders protested. A team of mobile police men came down to the site to warn them and guard the site, the problem of obsessive-compulsive stress disorder level, into accommodating the painful impacts, among the two communities mentioned, was noted, as tear-gas was pumped to the eyes of the protestant, the health hazards of recording higher number of death, was an open story. It was based on this that Orime, (2007). Viewed stress as any stimulus that disturbs the biological or psychological equilibrium of an organism which result to imbalances and severe pains, but a man who respond to a particular stressful situation, makes a stress good or bad, but if the stress is in positive side an (Eustress) result to the stressor but when the response is bad, it is a negative stress, defining the stress condition as (distress) to a stressor, but the evaluating tools is geared to the recipient of the impacts of the stress, as applicable to the residents of oil spilled communities.

RECOVERY AND CLEAN-UP/CONTROLS OF OIL SPILLAGE

Crude oil spills, can be recovered and clean-up using the following methods.

The use of mechanical process: This involves many devices, working in different principles; they are skinning method, use of mechanism that are spread in the surface water, for absorption of the oil into a revolving (disc or metallic belts) as supported by the use of skimmers, barrier skimmers, independent skimmers system, vessel of opportunity skimming systems etc.

The use of chemical dispersants: This is a group of chemical dispersants, which is sprayed into oil slicks, to accelerate the process of natural dispersion, this method, is used in sea, when the mechanical recovery method have failed; other methods are adsorption/absorption method, the insitu burning and manual recovery.

In addition to control the practice of oil exploration and exploitation, several laws have been put in place, law which is defined as an instrument of social engineering, which balances the conflicting interest in the society, must be open and be applied in a free and fair way, such laws are:

- a) The endangered species degree cap 108 LFN 1990
- b) Federal Environmental Protection Agency Act Cap 1312 LFN 1990
- c) Harmful waste Cap 165 LFN 1990
- d) Petroleum (Drilling and Production) regulations, 1966
- e) Mineral oil (safety) regulations, 1963

- f) International convention on the establishment of an international fund for compensation for oil pollution damaged, 1972 etc All these laws and statutory provision, exist to control oil spillage and haphazard detrimental operations, but yet citizens lament every day, weeping yearly, when will this lamentation, be put to an end? Especially where the spirit of environmental justice and ethics is absent.

CONCLUDING REMARKS

Notably, the book of Matthew chapter 7 vs 12: Have a golden rules which is defined as: doing for others what you would like them to do for you. This is a summary of all that is in the law and the prophet". With respect to oil companies, such as Agip Oil Company, the Shell B. P. Limited, etc have deviated from carrying out its essential social responsibility of catering for their host communities, located within their area of operation, rather than doing this, have decided to operate in I don't care syndrome associated with double frustrating and intimidating attitudes, they do this, by refusing to ensure safety of their pipe liens, well-heads, using the available computer aided monitoring devices to check and monitor the pipelines against corrosion.

Social amenities should be provided and in case of spills, due compensations be made to victims, in order to reduce youth grievances-against oil companies which may lead to vandallization of pipelines and company properties.

They should establish a regional spills centres along our coastlines, for quick responses to oil spill incidents those who suffered for related stresses, be made to be given due rehabilitation, while resources that suffered for severe oil spillage, be made to face a post impact assessment review programme, to judge the state of Biome, biotic and abiotic factors after and before the oil spillage, so as to recount:

- a) The level of bioremediation
b) The replenishment of bio-resources, in form of renewable resources and non renewable resources, with a view to obtain a sustainable eco-system.

A baseline bio-data of the eco-system, under investigation be used as an assessing data to bio-update the environment against the severe biodegrading nor pollution rate, suffered. This can also be achieved when thorough paleo-ecological reconstruction formula devoid of pseudo community manipulated data, rather than basing empirical scientific data on "carbon dating technology" as seen in Western world.

Efforts of the CNA, be re-intensified, and re-equipped to accommodate several cases of oil spill problems in Niger Delta at large.

Though it is written, according to Apostle Paul in the second book of Timothy Chapter 3:1-5, that in the last day, there will be stress, perilous time, love of money, parasite relationship etc such stress, be eradicated, by providing an open door policy of equal citizens participation in environmental safety decision making, where diverse opinions during round table discussion will be reviewed. In doing this, peace and development will be the order of the day.

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REFERENCES

A report from the Human Right watch on Dwelling Environment, (2007).

Adekunle, A. D. (1994): Gulf Oil a press briefing for the launching of Clean Nigeria Associate (C.N.A.).

Akakar, F. O. (2007): Unpublished materials, in Environmental law and policy, Faculty of Law, Rivers State University of Science and Technology in Port Harcourt.

Awobanjo, S. A. (1981): An analysis of oil spill incidents in Nigeria, 1976-1980.

Catalogue of oil spills in Rivers State (1980): "The petroleum industry and the Nigeria environment" Seminar Proceeding of the 1983 International Seminar).

Concawe, (1981): A Field guide to coastal oil spill control ones clean up techniques. (The oil companies international study group for conservation of clean air and water-Europe).

Nwankwo, J. N. (1982): After Oil what next? Oil and multi-nationals in Nigeria.

Orime, O. C. N. (2007): Fundamental of environmental safety education in Nigeria, victors publishing company No.1 Ogwa Street, Mile 1. Diobu, Port Harcourt. Rivers State, Nigeria.

Orime, O. C.N. (2008): Environmental Conservation for sustainable Development: A global focus. Lanupan Graphics Art and Printing, Shopping Complex, Rivers State University of Science and Technology, Port Harcourt.

The Holy Bible: Revised Standard Version.